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Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of

Complete if Known					
Application Number	10/706,142				
Filing Date	November 12, 2003				
First Named Inventor	Richard L. Bonkowski				
Art Unit	-1772 1732				
Examiner Name	Unknown				
Attorney Docket Number	48930-01703				

				U.S. PATEN	NT DOCUMENTS	
Examiner Initials*	Cite No.1		Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	 		umber-Kind Code ^{2(0 known)}	110/1061	0-1	1,80.00.4400
NOV	1	US-	3,011,383	12/1961	Sylvester, et al.	
4	2	US-	4,756,771	07/12/88	Brodalla, et al.	
	3	US-	4,779,898	10/25/88	Berning, et al.	
	4	US-	5,002,312	3/26/91	Phillips, et al.	
	5	US-	5,009,486	04/23/91	Dobrowolski, et al.	
	6	US-	5,084,351	01/28/92	Phillips, et al.	
	7	US-	5,171,363	12/15/92	Phillips, et al.	
	8	US-	5,364,467	11/15/94	Schmid, et al.	
	9	US-	5,648,165	07/15/97	Phillips, et al.	
	10	US-	5,650,248	07/22/97	Miekka, et al.	
	11	US-	5,763,086	06/09/98	Schmid, et al.	
	12	US-	5,858,078	01/12/99	Andes, et al.	
	13	US-	5,912,767	06/15/99	Lee	
	14	US-	5,989,626	11/23/99	Coombs, et al.	
	15	US-	6,013,370	01/11/00	Coulter, et al.	
	16	US-	6,045,230	04/04/00	Dreyer, et al.	
	17	US-	6,068,691	05/30/00	Miekka, et al.	
	18	US-	6,112,388	09/05/00	Kimoto, et al.	
	19	US-	6,168,100 B1	01/02/01	Kato, et al.	
MOV	20	υs	6,241,858 B1	06/05/01	Phillips, et al.	

Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Γ
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	
MOV	21	DE 43 43 387	06/25/95			
mov	22	EP 0 756 945	02/05/97			
MOV	23	WO 00/08596	02/17/00			
MOV	24	WO 98/12583	03/26/98			
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Examiner Signature	М	· Vaget		Date Considered	7	29	/or	·

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Sheet

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Co	mplete if Known			
Application Number	10/706,142			
Filing Date	November 12, 2003			
First Named Inventor	Richard L. Bonkowski			
Art Unit	1772			
Examiner Name	Unknown			
Attorney Docket Number	48930-01703			

				U.S. PATEN	IT DOCUMENTS	
Examiner Cite Initials* No.1		Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
	<u> </u>		umber-Kind Code ^{2(II known)}			Figures Appear
MPV	25	US-	4,066,280	01/03/78	LaCapria	
Á	26	US-	4,126,373	11/21/78	Moraw	
	27	US-	4,155,627	05/22/79	Gale, et al.	
	28	US-	4,168,983	09/25/79	Vittands, et al.	•
	29	US-	4,930,866	06/05/90	Berning, et al.	
	30	US-	5,009,486	04/23/91	Dobrowolski, et al.	
	31	US-	5,106,125	04/21/92	Antes	
	32	US-	5,214,530	05/25/93	Coombs, et al.	
	33	US-	5,254,390	10/1993	Shih-Lai Lu	
	34	US-	5,339,737	08/23/94	Lewis, et al.	
	35	US	5,464,710	11/07/95	Yang	
	36	US-	5,549,953	08/1996	Li Li	
	37	US-	5,591,527	01/1997	Shih-Lai Lu	
	38	US-	5,700,550	12/23/97	Uyama, et al.	
	39	US-	5,856,048	01/1999	Tahara, et al.	
	40	US-	6,031,457	02/29/00	Bonkowski, et al.	
	41	US-	6,150,022	11/2000	Coulter, et al.	
	42	US-	6,157,489	12/05/00	Bradley, Jr., et al.	
7	43	US-	6,242,510 B1	06/05/01	Killey	·
MAY	44	US-	6,243,204 B1	06/05/01	Bradley, Jr., et al.	

		FOREIGN P	ATENT DOCU	MENTS		
Examiner Initials*	Initials* No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Γ
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Examiner Date Considered Signature

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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of

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Complete if Known				
Application Number	10/706,142			
Filing Date	November 12, 2003			
First Named Inventor	Richard L. Bonkowski			
Art Unit	1772			
Examiner Name	Unknown			
Attorney Docket Number	48930-01703			

				U.S. PATE	NT DOCUMENTS	
Examiner Cit Initials* No			Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
	 		umber-Kind Code ^{2(t trown)}			Figures Appear
MOV	45	US-	Re.35,512	05/20/97	Nowak, et al.	
4	46	US-	4,168,983	09/25/79	Vittands, et al.	
	47	US-	4,434,010	02/28/84	Ash	
	48	US-	4,705,300	11/10/87	Berning, et al.	
	49	US-	4,705,356	11/10/87	Berning, et al.	
	50	US-	4,721,217	01/26/88	Phillips, et al.	
	51	US-	4,838,648	06/13/89	Phillips, et al.	
\top	52	US-	5,059,245	10/22/91	Phillips, et al.	
	53	US-	5,084,351	01/28/92	Phillips, et al.	
	54	US-	5,135,812	08/04/92	Phillips, et al.	
	55	US	5,171,363	12/15/92	Phillips, et al.	
	56	US-	5,278,590	01/11/94	Phillips, et al.	
	57	US-	5,279,657	01/18/94	Phillips, et al.	
	58	US-	5,549,774	08/27/96	Miekka, et al.	
	59	US-	5,571,624	11/05/96	Phillips, et al.	
	60	US-	5,624,076	04/29/97	Miekka, et al.	
-	61	US-	5,629,068	05/13/97	Miekka, et al.	
BYON	62	US-	5,672,410	09/30/97	Miekka, et al.	
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Examiner Initials*	xaminer Cite	Foreign Patent Document	Foreign Patent Document Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Γ
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Examiner Signature	M. Vaget	Date Considered 7.29/05

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)

Complete if Known				
Application Number	10/706,142			
Filing Date	November 12, 2003			
First Named Inventor	Richard L. Bonkowski			
Art Unit	1772			
Examiner Name	Unknown			

	•			Examiner Name	Unknown
Sheet	4	of	5	Attorney Docket Number	48930-01703

xaminer nitials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	63	John M. McKiernan, et al., "Luminescence and Laser Action of Coumarin Dyes					
MOU		Doped in Silicate and Aluminosilicate Glasses Prepared by the Sol-Gel					
1400		Technique," Journal of Inorganic and Organometallic Polymers, Vol. 1, No. 1, 1991, pages 87-103.					
Ť	64	Jeffery I. Zink, et al., "Optical Probes and Properties of Aluminosilicate Glasses					
		Prepared By The Sol-Gel Method," Polym. Mater. Sci. Eng., pages 204-208 (1989).					
	65	Don W. Tomkins, Kurz Hastings, "Transparent Overlays for Security Printing and					
- 1		Plastic ID Cards," Pages 1-8, November, 1997.					
	66	The Mearl Corporation brochure for "Mearl Iridescent Film," Peekskill, NY.					
1	67	J.A. Dobrowolski; K.M. Baird; P.D. Carman; and A. Waldorf, "Optical					
1		Interference Coatings for Inhibiting of Counterfeiting," Optica Acta, 1973, Vol.					
	20, No. 12, 925-937.						
	68	The R.D. Mathis Company Manual for "Thin Film Evaporation Source					
		Reference," Long Beach, CA.					
	69	Minolta Manual for "Precise Color Communication, Color Control From Feeling					
		to Instrumentation," Pages 18, 20, 22, 23, 46, 47, 48 and 49.					
1	70	Frans Defilet, LGZ Landis & Gyr Zug Corporation, "Kinegrams 'Optical Variable					
1		Devices' (OVD's) For Banknotes, Security Documents and Plastic Cards," San					
		Diego, April 1-3, 1987					
	71	S.P. McGrew, "Hologram Counterfeiting: Problems and Solutions," SPIE, Volume					
		1210 Optical Security and Anticounterfeiting Systems, 1990, Pages 66-76.					
	72	Rudolf L. van Renesse, "Security Design of Valuable Documents and Products,"					
		SPIE, Vol. 2659, June 1996, Pages 10-20.					
1	73	Steve McGrew, "Countermeasures Against Hologram Counterfeiting," Internet					
\perp		site www.iea.com/nli/publications/countermeasures.htm, January 6, 2000.					
- { -	74	Roger W. Phillips, "Optically Variable Films, Pigments, and Inks," SPIE Vol.					
		1323, Optical Thin Films III: New Developments, 1990, Pages 98-109.					
415	75	Roger W. Phillips, and Anton F. Bleikolm, "Optical Coatings for Document					
MOV		Security," Applied Optics, Vol. 35, No. 28, October 1, 1996, Pages 5529-5534.					

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and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁴Applicant is to place a check mark here if English language Translation is attached.

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS) title of the adicie (when appropriate), title of the Item (book, magazine journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
mov	76	J.A. Dobrowolski; F.C. Ho; and A. Waldorf, 'Research on Thin Film Anticounterfeiting Coatings at the National Research Council of Canada," Applied Optics, Vol. 28, No. 15, July 15, 1989, pages 2702-2717.	
9	77	J. Rolfe, "Optically Variable Devices for Use on Bank Notes, "SPIE, Vol. 1210 Optical Security and Anticounterfeiting Systems, pages 14-19, 1990.	
	78	OVD Kinegram Cor, "OVD Kinegram Management of Light to Provide Security," Internet site www.kiknegram.com/xhome/home.html , December 17, 1999.	
Mov	79	I.M. Boswarva, et al., "Roll Coater System for the Production of Optically Variable Devices (OVD's) for Security Applications," Proceedings, 33 rd Annual Technical Conference, Society of Vacuum Coaters, pages 103-109 (1990).	

Date Examiner Considered Signature

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Form PTO	1449A	Атт	Y. DOCKET NUMBER:	SERI	al Numb	ER:		
U.S. Department of Commerce Patent and Trademark Office Information Disclosure Statement by Applicant			78384 (18-32 US DIV1)		10/706,142			
		APP	LICANT:					
		PHI	LLIPS ET AL					
		FILE	NG DATE:	GRO	UP:			
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	·	U.	S. Patent Documents					
EXAMPLES INITIAL	DOCUMENT NUMBER	DATE	NAME		CLASS	\$100CLASS	FILX Apri	
prov	6,692,830	Feb 17, 20	04 Argoitia et al.	-	428	403		
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EXAMPLES ENTRAL	DOCUMENT NUMBER	DATE	NAME	CIASS	\$UNCLASS	FILC
prov	6,692,830	Feb 17, 2004	Argoitia et al.	428	403	
1	6,749,777	Jun 15, 2004	Argoitia et al.	252	582	
	6,761,959	July 13, 2004	Bonkowski et al.	428	156	
	20040081807	Apr 29, 2004	Bonkowski et al.	428	195.1	
	20040105963	Jun 3, 2004	Bonkowski et al.	428	195.1	
	10/666,318	Sep 18, 2003	Phillips et al.	-		
MOV	11/047,389	Jan 31, 2005	Phillips et al.		- 1	

Foreign Patent Documents

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRAN	SLATION
						YES	No

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

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EXAMINER	111				
-	M. Vargo	<u> </u>	DATE CONSIDERED	7/29/05	
EXAMINE through c applicant	itation if not in co	n is considered, wheth informance and not co	er or not citation is in connsidered. Include copy of	formance with MPL this form with next	EP 609; draw a line communication to